WHAT IS CLAIMED IS:

1. A method of manufacturing a continuous sheet of a metallic glass foam from a bulk-solidifying amorphous alloy comprising:

providing a quantity of a bulk solidifying amorphous alloy foam precursor at a casting temperature wherein the viscosity of the bulk solidifying amorphous alloy is from about 0.1 to 10,000 poise;

introducing the heated bulk solidifying amorphous alloy foam precursor onto a moving casting body such that a continuous sheet of heated bulk solidifying amorphous alloy is formed thereon; and

quenching the heated bulk solidifying amorphous alloy foam precursor at a quenching rate sufficiently fast such that the bulk solidifying amorphous alloy remains in a substantially amorphous phase to form a solid amorphous continuous foam sheet.

2. The method according to claim 1, wherein the precursor is formed by providing a molten bulk-solidifying amorphous alloy; and

introducing a plurality of gas bubbles to the molten alloy at a temperature above the liquidus temperature of the molten alloy to form a pre-cursor.

3. The method of claim 1, wherein the viscosity of the bulk solidifying amorphous alloy at the "melting temperature" Tm of the bulk solidifying amorphous alloy is from about 0.1 to 10,000 poise.

4. The method of claim 1, wherein the viscosity of the bulk solidifying amorphous alloy at the "melting temperature" Tm of the bulk solidifying amorphous alloy is from about 1 to 1000 poise.

5. The method of claim 1, wherein the critical cooling rate of the bulk solidifying amorphous alloy is less than 1,000 °C/sec.

6. The method of claim 1, wherein the critical cooling rate of the bulk solidifying amorphous alloy is less than 10 °C/sec.

7. The method according to claim 2, wherein the gas bubbles are introduced to the molten alloy by stirring the molten alloy.

8. The method according to claim 2, wherein the gas bubbles are introduced to the molten alloy by adding an gas releasing agent to the molten alloy.

9. The method according to claim 1, wherein a volume fraction of < 30% of a plurality of bubbles having sizes between 1 μm and 1mm are introduced to the molten alloy.

10. The method according to claim 1, wherein at least 50% by volume of the metallic glass foam has an amorphous atomic structure.

11. The method according to claim 1, further including homogenizing the expanded bubbles by mechanically stirring the pre-cursor.

12. The method according to claim 1, wherein the step of introducing gas bubbles to form the pre-cursor occurs at a pressure up to 50 bar or more.

13. The method according to claim 1, wherein the bubbles of the metallic foam have a size distribution of about 10 μm.

14. The method according to claim 1, wherein the bulk solidifying amorphous alloy is a Zr-base amorphous alloy.

15. The method of claim 1, wherein the quenching occurs on the casting body.

16. The method of claim 1, wherein the casting body is selected from the group consisting of a wheel, a belt, double-roll wheels.

17. The method of claim 1, wherein the casting body is formed from a material having a high thermal conductivity.

18. The method of claim 1, wherein the casting body is formed of a material selected from the group consisting of copper, chromium copper, beryllium copper, dispersion hardening alloys, and oxygen-free copper.

19. The method of claim 1, wherein the casting body is at least one of either highly polished or chrome-plated.

20. The method of claim 1, wherein the casting body moves at a rate of 0.5 to 10 cm/sec.

21. The method of claim 1, the casting temperature of the alloy is stabilized in a viscosity regime of 1 to 1,000 poise.

22. The method of claim 1, wherein the casting temperature of the alloy is stabilized in a viscosity regime of 10 to 100 poise.

23. The method of claim 1, wherein the foam sheet has a thickness of 0.1 to 10 mm.